

What is claimed is:

5 1. A vehicle information processing method for use upon
processing of diversified pieces of information including a
message arriving at and/or generated in a vehicle, comprising:
integrating said diversified pieces of information and
providing each of the integrated pieces of information with
a priority order indicating an importance of each information;
when one or two or more pieces of information arrive
10 at and/or are generated in said vehicle, allocating an
appropriate resource selected from the diversified resources
for using the generated information to the generated
information according to the priority order given to the
generated information.

15 2. A vehicle information processing method according
to claim 1 wherein

the importance of said each information is defined so
as to include a level of danger introduced from a degree of
20 seriousness of a situation which may occur if the same
information is neglected and

the priority order indicating the importance of said
each information is given to said each information based on
said level of danger.

25 3. A vehicle information processing method according
to claim 2 wherein

the importance of said each information is defined so
as to include said level of danger and a level of urgency
30 introduced from a length of reaction time required until a
driver takes a reaction since he recognizes said each
information, and

the priority order indicating the importance of said
each information is given to said each information based on
35 said level of danger and said level of urgency.

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4. A vehicle information processing method according to claim 1 wherein the diversified resources for using the information generated in said vehicle include one or two or more information communicating means prepared for each organ of sense so as to communicate the information to a driver by appealing to a combination of one or two or more organs of sense.

5. A vehicle information processing method according to claim 4 wherein the diversified resources for using the information generated in said vehicle include one or two or more information communicating styles corresponding to the characteristic of each information communicating means.

6. A vehicle information processing method according to claim 4 wherein the diversified resources for using the information generated in said vehicle include an information communicating style suitable for the driver to grasp a situation.

7. A vehicle information processing method according to claim 4 wherein the diversified resources for using the information generated in said vehicle include an information communicating style suitable for the driver to recognize a reaction which he should take.

8. A vehicle information processing method according to claim 4 wherein when communicating the information to the driver using an appropriate resource selected from said diversified resources, a combination of one or two or more appropriate resources is selected from said diversified resources based on a combination of one or two or more of the quantity of information to be communicated, a content thereof, an appropriate communication timing, importance of said information and information communicating capacity inherent of each of said diversified resources, so as to communicate

the information to the driver using the selected resources.

5 9. A vehicle information processing method according to claim 1 wherein the diversified resources for using the information generated in said vehicle include a self-traveling control means having a function for controlling self-traveling of said vehicle based on the same information.

10 10. A vehicle information processing method according to claim 9 wherein said self-traveling control means has a function for controlling a speed of said vehicle and/or a steering angle thereof based on said information generated in the vehicle so as to aim at the self-traveling of said vehicle.

15 11. A vehicle information processing apparatus having a function for processing diversified pieces of information including a message arriving at and/or generated in a vehicle, comprising:

20 a priority order control means for integrating said diversified pieces of information and providing each of the integrated pieces of information with a priority order indicating an importance of each information so as to control the priority orders;

25 a resource allocation control means for, when one or two or more pieces of information arrive at and/or are generated in said vehicle, allocating an appropriate resource selected from the diversified resources for using the generated information to the generated information according to the priority order given to the generated information.

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12. A vehicle information processing apparatus according to claim 11 wherein the importance of said each information is defined so as to include a level of danger introduced from a degree of seriousness of a situation which may occur if the same information is neglected,

said priority order control means providing said each

information with the priority order indicating the importance of said each information based on said level of danger.

13. A vehicle information processing apparatus
5 according to claim 12 wherein the importance of said each information is defined so as to include said level of danger and a level of urgency introduced from a length of reaction time required until a driver takes a reaction since he recognizes said each information,
10 said priority order control means providing said each information with the priority order indicating the importance of said each information based on said level of danger and said level of urgency.

15 14. A vehicle information processing apparatus according to claim 11 wherein the diversified resources for using the information generated in said vehicle include one or two or more information communicating means prepared for each organ of sense so as to communicate information to a driver
20 by appealing to a combination of one or two or more organs of sense.

25 15. A vehicle information processing apparatus according to claim 14 wherein the diversified resources for using the information generated in said vehicle include one or two or more information communicating styles corresponding to the characteristic of each information communicating means.

30 16. A vehicle information processing apparatus according to claim 14 wherein the diversified resources for using the information generated in said vehicle include an information communicating style suitable for the driver to grasp a condition.

35 17. A vehicle information processing apparatus according to claim 14 wherein the diversified resources for

using the information generated in said vehicle include an information communicating style suitable for the driver to recognize a reaction which he should take.

5 18. A vehicle information processing apparatus according to claim 14 wherein said resource allocation control means, when allocating appropriate resources for communicating the information which is an objective of communication, selects a combination of one or two or more
10 appropriate resources from said diversified resources, based on a combination of one or two or more of the quantity of information, a content thereof, an appropriate communication timing and importance of said information and information communicating capacity inherent of each of said diversified
15 resources and

 said information communicating means selected by said resource allocation control means communicates the information to the driver using the resources selected by said resource allocation control means.

20 19. A vehicle information processing apparatus according to claim 11 wherein the diversified resources for using the information generated in said vehicle include a self-traveling control means having a function for controlling
25 self-traveling of said vehicle based on the same information.

 20. A vehicle information processing apparatus according to claim 19 wherein said self-traveling control means has a function for controlling a speed of said vehicle and/or
30 a steering angle thereof based on said information generated in the vehicle so as to aim at the self-traveling of said vehicle.

 21. A vehicle loaded with the vehicle information processing apparatus according to claim 11.

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